# QUICK GUIDE FOR PLANNING A RETAIL FOOD ESTABLISHMENT

September 2016

This Quick Guide is intended to aid the owner and the food industry, equipment dealers, architect, engineers, consultant and others with Regulation 61-25 requirements. The Quick Guide is designed to assist the owner or presiding officer in preparing and submitting a complete application for permit at least 30 calendar days before the date planned for opening. This Quick Guide is also intended to assist the owner and contractor in preparing for and scheduling a pre-operational inspection at least 14 calendar days prior to an inspection to issue a permit. This is only a guide. The proposed retail food establishment submittal may require more extensive information.

For the minimum requirements please refer to South Carolina Department of Health & Environmental Control, Regulation 61-25, Retail Food Establishments. If there are further questions please contact the local EQC- Regional Environmental Health Services Office or visit our website at <a href="http://www.scdhec.gov/FoodSafety/FoodServiceIndustry">http://www.scdhec.gov/FoodSafety/FoodServiceIndustry</a>.

#### **SECTION 1 - FOOD HANDLING**

## List of Foods to be Served (Menu): (8-302.14(A)(2))

Having an idea of the types of foods that are to be prepared and served will help in determining the types of equipment needed.

## Food Handling Procedures: (3-3)

Once the types of foods to be prepared and served are determined, the next step is to decide how each food item will be handled to include preparation, storage, cooking, heating, cooling, refrigerating, displaying, etc.

Descriptions, including specific areas of the food service establishment where food is handled, will provide a guide to planning the layout of food equipment. This will also assist in determining the types and quantities of food equipment needed.

Sections below are provided as a work space for handling procedures and processes needed for foods prepared in a retail food establishment. Description of the process from receiving to ready-to-eat should include:

- How the food will arrive. (frozen, fresh, packaged, etc.)
- Where the food will be stored. (cooler, freezer, dry storage)
- Where the food will be handled. (prep table, sink, counter, etc.)
- How the food will be handled. (washed, cut, marinated, breaded, cooked, etc.)
- When food will be handled. (time of day and frequency/day)

Ready-to-Eat Food Handling: (3-301.11(B), 3-302.11(A), 3-306.13, 3-501.17) (Edible without additional preparation necessary.)					
Poultry Handling: (3-401)					
Meat Handling: (3-401)					

<u>Seafood Handling</u> : (3-201.14, 3-202.17 - 3-202.19, 3-203, 3-401, 3-402)							
Sushi Preparation	: (3-402,	3-502.11(C	())				
Produce Handling	: (3-302.1	14 (B), 3-30	2.15)				
<u>Dry Storage</u> : (3-305.11, 3-305.12)							
Processes:  Reheating for Hot (Time/temperature commercially proce	control fo	r safety (TC	CS) foods re	eheated to at least 165°F (74°C) within 2 hours. Ready t least 135°F (57°C).	-to-eat (F	RTE)	
Food Item Method of Reheating			Method of Reheating	RT	E?		
					Yes	No	
					Yes	No	
				Yes	No		
		Ye				No	
Cooling Process: (3-501.14, 3-501.15) (Check appropriate boxes TCS foods are to be cooled to 70°F (21°C) within 2 hours and to 41°F (5°C)* within another 4 hours.)							
	Meat	Seafood	Poultry	Other (describe food type)			
Shallow Pans in Refrigeration							
Ice baths							
Rapid Chill							
Other Method							

#### Thawing Process: (3-501.13)

(Check appropriate boxes how food in each category will be thawed.)

	Meat	Seafood	Poultry	Other (describe food type)
Refrigeration				
Running water 70°F (21°C) or below				
Cooked from Frozen				
Microwave				

#### SECTION 2 - FOOD VOLUME/SPECIAL PROCESS/ADVISORY

#### Anticipated Volume of Food: (8-302.14(A)(3))

Having an idea of the number of meals to be served/sold will help with determining the size of the food preparation area needed, the types and quantities of cooking and refrigeration equipment, the size of the dry storage area and/or frequency of supply deliveries needed.

## Special Process or Procedure: (3-401.11(D)(4), 3-502.11, 3-502.12, 8-103, 8-201, 8-302.14(A)(4))

A Retail Food Establishment whose operation involves a special process or procedure such as smoking, curing, sushi rice, ROP, Sous Vide, or cook/chill may submit in writing a request for modification or waiver to the Department, for review and approval.

Written submittal must include all documentation that supports the safe use of the special process or procedure.

#### **Consumer Advisory: (3-603)**

When animal-derived foods are served raw, undercooked or not otherwise processed to eliminate pathogens, a disclosure and reminder must be provided using menu advisories, table tents, placards or other effective written means.

- Disclosure must be provided by one of the following methods:
  - Describe animal-derived foods offered (e.g. raw eggs Caesar salad, oysters on the half-shell (raw oysters), hamburgers can be cooked to order).
  - Asterisking the identified animal-derived foods to a footnote that state that the food items are served raw, undercooked or contains raw or undercooked ingredients.
- Reminder must:
  - Include asterisking the animal-derived food requiring disclosure to a footnote regarding the safety of the food item(s).
  - o Footnote must state that written information is available upon request.
- <u>Example of disclosure and reminder footnote</u>: Consuming raw or undercooked meats, poultry, seafood, shellfish or eggs may increase your risk of foodborne illness.
- Point of sale placard must be provided for packaged raw milk.
  - o Packaged raw milk must meet the requirements of R. 61-34, Raw Milk for Human Consumption.

## **SECTION 3 - CONSTRUCTION**

## Living and Sleeping Quarters: (6-202.111, 6-202.112)

- A private home, a room used or directly opening into a room used as living or sleeping quarters may not be used
  to conduct retail food establishment operations.
- On premises living and sleeping quarters provided for lodging registration clerks or resident managers must be separated from rooms and areas used for Retail Food Establishment operations.

#### Types of Retail Food Establishments: (1-201.10(106))

Below are examples of retail food establishment operations.

- Restaurant: Fast food, casual dining, deli, snack bar, ice cream parlor, full service, buffet, commissary, etc.
- Institution: School cafeteria, jail, correctional facility, hospitals, nursing facilities, etc.

- Grocery Store (may include one or more of the following areas): Meat market, seafood market, deli department, bakery department, produce department, etc.
- Mobile Food (must be associated with a commissary): Pushcart, food truck, food trailer, etc.

For additional operations, see R. 61-25, Chapter 9, Standards for Additional Retail Food Establishment Operations.

#### **Drinking Water Supply:** (5-101.11, 5-103.11(A), 5-103.12, 8-302.14(A)(5))

Drinking water supply must be under pressure to all fixtures and equipment and from an approved source that is:

- A public water system of a city, town or other municipality, or
- A public water system (including a well), constructed for use by the retail food establishment.
- Of sufficient capacity to meet peak water demands.

#### Backflow Prevention (Water): (5-202.13, 5-202.14, 5-203.14, 5-203.15, 5-204.12)

To protect the drinking water supply from contamination by questionable water, chemicals or other source of pollution, a method of backflow prevention must be provided at each point of use at the Retail Food Establishment.

Backflow prevention may be achieved by:

- An air gap between the water supply inlet and the flood level rim of the plumbing fixture, equipment or non-food equipment.
  - Air gap must be at least twice the diameter of the water supply inlet (spigot).
  - o Air gap may not be less than one (1) inch.
- A backflow prevention device meeting construction, installation, maintenance, inspection and testing standards specified by the public water system supplying water to the retail food establishment.
  - o A back-flow prevention device must be located so that it may be serviced and maintained.

<u>Examples of fixtures that may require backflow prevention</u>: Warewasher, hose reel, disposal, waste pulper, dipper well, proofer, automatic fill water line on a steam table or a pasta cooker (rethermalizer); submerged water line on a wok stove or scrapping trough; water connection on a water chiller, convection steamer, rotisserie oven, rack oven or combi-therm oven; beverage dispensers, coffee/tea brewers and interior and exterior hose bibs if a hose is attached.

\*\*The main backflow prevention device required by the water supplier protects the main water supply only. In other words, it protects others from potential contamination from your facility. It does not provide protection from possible contamination within your facility.

Note: A simple untested check valve is not very reliable and is usually not considered an acceptable method of backflow prevention. It is recommended that backflow prevention devices meet A.S.S.E. International standards specified for the application. However, backflow prevention devices must meet requirements specified by the public water system supplying water to the facility.

#### Sewage Disposal: (5-403.11, 8-302.14(A)(6))

Liquid waste containing animal or vegetable matter (sewage), that may also include chemicals, must be disposed through one of the following approved facilities:

- A public sewage treatment plant.
- An individual sewage disposal system.

## Grease Trap/Grease Interceptor: (8-302.14(A)(6))

The purpose of a grease trap or a grease interceptor is to reduce the amount of fat, oil and grease (FOG) that enters a wastewater disposal system. Whether a grease trap or grease interceptor is required, is determined by the sewer purveyor.

For information on an individual sewage disposal system and grease traps or grease interceptors, refer to *South Carolina Department of Health & Environmental Control, Regulation 61-56, Onsite Wastewater Systems.* 

## Grease Trap: (5-402.12(A)(1-3))

When installed, a grease trap must be located outside so that it is easily accessible for cleaning and maintenance.

<u>Exception</u>: When the building is the property line, a grease trap may be installed inside the Retail Food Establishment provided it meets the following installation requirements.

- A grease trap located inside a retail food establishment must not be installed in:
  - o Food preparation, dispensing or storage areas.
  - Food equipment storage areas.
  - Equipment and utensil washing areas.
  - Single-service articles storage areas.
- Location of a grease trap inside must not result in servicing hoses and pumps having to run through the following areas to reach it:
  - Food preparation, dispensing or storage areas.
  - Food equipment storage areas.
  - Equipment and utensil washing areas.
  - Single-service articles storage areas.

## <u>Grease Interceptor</u>: (5-402.12(B)(1-4))

When installed, a grease interceptor:

- May be installed in:
  - o Food preparation areas.
  - o Food storage areas.
  - Equipment and utensil washing areas.
- When installed on the floor:
  - o Must have a minimum unobstructed access clearance of twenty-four (24) inches above the interceptor.
  - Must be spaced at least six (6) inches away from walls, stationary equipment or other adjacent surfaces.
- When recessed to floor level:
  - o Must have a minimum unobstructed access clearance of twenty-four (24) inches above the interceptor.
  - Equipment must not be placed on top of the interceptor.
    - Exception: Floor-mounted equipment that is mobile or portable may be located on the unit.
- Grease interceptors are to be serviced manually.

## Backflow Prevention (Sewage): (5-402.11)

A direct connection must not exist between the sewerage system and any drains connected to equipment in which food, portable equipment or utensils are placed.

<u>Examples</u>: Steam table, ice bin, ice machine, beverage dispenser, warewashing machine, wok stove, dipper well, buffet bar (ice or hot), condensate drain line.

## Exceptions:

- A warewashing or food preparation (culinary) sink may have a direct connection.
- When a warewashing machine is located within five feet of a trapped floor drain serving the machine, the machine waste outlet may be connected directly on the inlet side of the properly vented floor drain.

#### Indoor (Finishes): (6-101.11, 6-201)

Floors, walls and ceilings must be smooth, durable, nonabsorbent and easily cleanable in the following areas:

- Food preparation areas.
- Walk-in refrigeration units.
- Warewashing areas.

Floors, walls and ceilings subject to moisture must be nonabsorbent in the following areas:

- Toilet rooms.
- Other areas subject to flushing or spray cleaning methods.

Floors, walls and ceilings must be smooth, durable and easily cleanable in the following areas:

- Dry storage area.
- Bar area.

## Suggestions:

- To test a material under consideration in areas where finishes are to be smooth, nonabsorbent and easily cleanable, spread mustard or ketchup on a sample and allow it to set for at least 30 minutes. Wipe and review the surface. Was a stain left on the surface? Did the ketchup or mustard collect in grooves, crevices or divots? Were chemicals and heavy scrubbing needed to clean the surface?
- To test a material under consideration in areas where finishes are to be nonabsorbent, put a few drops of water on a sample. Does the water bead or does it soak into the sample?

#### Floors:

- Anti-slip floor coverings or applications may be used.
  - o Abrasive anti-slip finishes should be used in traffic areas only.
- Horizontal utility service lines and pipes may not be exposed on the floor.
- Floors that are to be water-flushed:
  - Must be graded to a drain(s).
  - Floor and wall junctures must be coved and sealed.
- Floors that are mopped or cleaned using methods other than water-flushing must:
  - Be coved at the wall and floor junctures.
  - Have junctures coved and closed to no larger than 1/32".

#### Walls:

- Utility lines may not unnecessarily be exposed on walls.
- Indoor walls constructed of concrete, porous block or brick must:
  - o Be rendered non-porous and smooth so that the surface is like sheetrock.
    - Exception: Not required in dry storage areas.
  - Have a nonabsorbent and easily cleanable surface
- Areas subject to moisture must be nonabsorbent up to the highest leave of splash or spray.
- Studs may not be exposed in areas subject to moisture. This includes areas underneath food service and bar counters.

#### Ceilings:

- Utility lines may not unnecessarily be exposed on ceilings.
- Joists and rafters may not be exposed in areas subject to moisture.

## Outer Openings/Insect Control: (6-202.13, 6-202.15)

- Outer openings must be effectively protected from insect and rodent entry by:
  - o Filling or closing holes and other gaps along floors, walls and ceiling.
  - Solid, self-closing doors.
  - Closed tight-fitting windows.
  - Screening (sixteen (16) mesh to one (1) inch) or effective air curtains. Used at doors and windows
    when there are ventilation needs.
- Insect devices designed to electrocute or stun flying insects must be:
  - Designed to retain the insect within the device.
  - o Installed so that they are not located over food preparation areas.

#### Lighting: (6-202.11, 6-303)

Light bulbs must be shielded, coated or shatter-resistant in areas of:

- Exposed food; clean equipment, utensils, linens; or unwrapped single-service and single-use articles.
- <u>Exceptions</u>:
  - Bulbs in areas used only for storing food in unopened packages that will not be affected by broken glass falling onto them and are capable of being cleaned of all glass debris are not required to be shatterresistant or otherwise covered.
  - Infrared or other heat lamp must be protected against breakage by a shield surrounding and extending beyond the bulb so that only the face of the bulb is exposed.

At least 10 food-candles (108 lux) of light measured at 30" above the floor provided in:

Walk-in refrigeration units.

- Dry storage areas.
- Other rooms and areas during cleaning.

At least 20 foot-candles (215 lux) of light provided:

- Inside reach-in and under-counter refrigerators and similar equipment.
- At the surface of customer self-service buffet and salad bars.
- Where fresh produce or packaged foods are sold or offered for consumption.
- At 30" above the floor in:
  - Areas used for handwashing, warewashing and equipment and utensil storage.
  - o Toilet rooms.

At least 50 foot-candles (540 lux) of light provided where:

- Employees are working with food.
- Employees are working with equipment or utensils such as:
  - o Knives, slicers, grinders or saws.
  - o Anywhere else employee safety is a factor.

#### Toilet room: (2-103.11(B), 5-501.17, 6-202.14, 6-402)

- Toilet rooms:
  - Must be conveniently located and accessible to employees during all hours of operation.
  - o That open directly into the retail food establishment must:
    - Be completely enclosed.
    - Have tight-fitting, self-closing doors.
- A covered receptacle must be provided for toilet rooms used by females.
- Handwashing sinks must be located in or immediately adjacent to toilet rooms.

The path to toilet rooms provided for customer use may not travel through food preparation, food storage or warewashing areas.

#### Lockers and Dressing Areas: (6-305, 6-403.11(B))

Lockers or other suitable facilities for employee personal items must be provided and located in a designated area or room where contamination of food, equipment, utensils, linens, single-service and single-use articles can not occur.

If employees will routinely change their clothes in the establishment, dressing rooms or areas must be designated for that purpose.

#### Hot Water: (5-103.11(B))

The hot water generation and distribution system should be:

- Sufficient to meet peak hot water demands throughout the Retail Food Establishment.
- A system dedicated to the retail food establishment only.
  - A clothes washer for food service linens and/or an employee toilet room located in the retail food establishment may be connected to the hot water system for the Retail Food Establishment.
- Examples of hot water fixtures that must be on a separate system from the Retail Food Establishment within a facility are:
  - Hotel or motel guest rooms, laundry rooms, showers, hot tubs, jacuzzis.
    - The public toilet room(s) intended to be used by food service employees are not required to be on the hot water system for the retail food establishment. However, the public toilet room(s) used by employees must meet all other requirements that apply.
    - When the hotel/motel laundry room is used for cleaning of linens, cloths, etc. used in the Retail Food Establishment, the laundry room is not required to be on the hot water system for the Retail Food Establishment.
  - Manufacturing industry hot water fixtures.
  - School classrooms, gymnasium showers.
  - Dormitory rooms, athletic areas.
  - o Travel center showers.
  - o Customer locker rooms with showers at golf centers, country clubs, athletic centers, etc.
  - Office building hot water fixtures.

#### Ventilation: (4-204.11, 4-301.14, 6-304)

When necessary, ventilation of sufficient capacity must be provided to keep the facility free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes.

When ventilation hood systems are installed in food preparation and warewashing areas, they must be:

- Sufficient in number and capacity to prevent grease or condensation from collecting on floors, walls and ceilings.
- Designed to prevent grease or condensation from dripping or draining onto food, equipment or utensils.

For questions about ventilation hood systems for cooking and warewashing equipment, contact the local Fire, Mechanical and Building Official.

#### **SECTION 4 – WAREWASHING EQUIPMENT/SINKS**

#### Cleaning and Sanitizing Equipment and Utensils:

A mechanical or manual warewashing operation must be designed and sized to accommodate the cleaning and sanitizing of the equipment and utensils that are to be used.

A commercial mechanical warewasher and all other warewashing equipment must meet NSF/ANSI, (or other accredited ANSI commercial food equipment sanitation certification).

<u>Mechanical Warewashing</u>: (4-204.113, 4-204.114, 4-204.118, 4-204.119, 4-301.13, 4-302.13(B), 4-302.14, 4-501.15, 4-501.110(B), 4-501.114, 4-603.12)

The following is required for a mechanical warewashing operation:

- Mechanical warewasher must operate per manufacturer's affixed data plate and other manufacturer's instructions.
- Data plate must be positioned so that it is accessible and must be readable.
- Drainboards must be self-draining.
- Drainboards, utensil racks or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation provided.
- A pre-rinse sink provided for removing gross food particles and when necessary to soak utensils, and/or a prewash cycle provided as part of the warewashing machine operation.
- On a conveyor or flight-type warewasher, curtains provided and properly installed.
- Hot water sanitization requirements:
  - o Flow pressure on the final rinse must be in the range specified by the manufacturer, but may not be:
    - Less than 5 psi (pounds per square inch).
    - Greater than 30 psi.
  - Pressure reducing valve must be designed to regulate water pressure of the final rinse between 5-30 psi.
    - Not required on a pumped final rinse warewashing machine.
  - Pressure gauge provided to measure final rinse pressure (see range specified above).
- Chemical sanitization requirements:
  - Contact time of chemical must be consistent with its EPA-registered label use instructions.
  - Chemical test kit provided must accurately measure chemical concentration.
    - Chlorine
    - lodine
- Chemical sanitizing mechanical warewashing temperature may not be less than 120°F.
- Exception: Equipment such as a frozen dessert machine may be designed with a mechanical **clean-in-place** (CIP) system that cleans and sanitizes the inside components of the unit.

## <u>Manual Warewashing (Utensil Sinks)</u>: (4-204.116, 4-204.119, 4-301.12, 4-301.13, 4-302.13(A), 4-302.14, 4-501.19, 4-501.114)

Providing information on the manual warewashing operation is a part of the application process. A manual warewashing operation involves the following:

- Washing, rinsing and sanitizing sink compartments are to be large enough to accommodate immersion of the largest equipment or utensils.
- Drainboards must be self-draining.
- Drainboards, utensil racks or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation provided.
- Hot water of at least 110°F is to be maintained in the wash compartment.

- Hot water sanitization requires:
  - Hot water of at least 171°F (77°C) maintained at the sanitizing compartment of the sink.
  - Built in temperature measuring device (thermometer) for sanitizing compartment.
  - Dish basket or rack provided.
- Chemical sanitization requires:
  - Contact time of chemical must be consistent with its EPA-registered label use instructions.
  - Chemical test kit provided must accurately measure chemical concentration.
    - Chlorine
    - Quaternary Ammonium
    - lodine
    - Other (specify)\_\_\_\_
- Providing a temperature measuring device.
- <u>Exception</u>: Fixed equipment that is too large to be cleaned in the utensil sink, such as band saws, slicers or mixers are subject to manual **in-place** cleaning, rinsing and sanitizing.

Handwashing Sinks: (3-305.11(A)(2), 5-202.12, 5-203.11, 5-204.11, 5-205.11, 5-501.16(C), 6-301, 6-401)

Handwashing sinks must be:

- Located and maintained so that they are accessible and will allow convenient use by employees in food
  preparation, food dispensing and warewashing areas.
  - Handwashing sinks recessed under counters or between pieces of equipment are examples of inaccessible installations.
  - o Barriers to access, such as speed rails should not be installed in front of handwashing sinks.
  - Handwashing sinks should be installed at a distance to prevent splash from hand washing contaminating food, food contact surfaces or food storage containers. When this is not possible a barrier to prevent possible contamination should be installed.
- Located in or immediately adjacent to the toilet room(s).
- Provided with:
  - Hot water at least 100°F (38°C) through a mixing valve or combination faucet.
  - Handwashing soap (cleanser).
  - Hand drying (paper towels, hand drying device, etc.).
  - A waste receptacle if disposable towels are provided.
  - o Handwashing signage at sinks used by employees.

#### Service Sink (mop sink, can wash): (5-203.13, 6-306)

A service sink or curbed facility must be provided and conveniently located for the:

- Disposal of mop water and similar liquids.
- Cleaning of mops and similar wet floor cleaning tools.

<u>Recommendation</u>: The installation of a floor mounted service sink minimizes the height of splash and potential damage to the service sink basin from the lifting of a heavy mop bucket.

#### **Water Fixtures:**

Identifying the water fixtures needed to operate the facility will assist in:

- Determining sinks needed for handwashing, cleaning equipment & utensils and maintaining the Retail Food Establishment.
- If needed, identifying sinks for food preparation.

When considering types and quantities of sinks needed for the operation of the facility note the following:

- A warewashing sink, food preparation sink or service sink may not be used for handwashing. (2-301.15, 4-501.16(A))
- A toilet or urinal may not be used as a service sink. (5-203.13(B))
- Handwashing sinks are to be used for handwashing only. (5-205.11(B))
- Handwashing sinks, food preparation sinks and warewashing equipment may not be used for the disposal of mop water and similar liquid waste, the cleaning of maintenance tools, or preparation or holding of maintenance materials. (6-501.15)

#### SECTION 5 - COOKING/REFRIGERATION/OTHER EQUIPMENT

All food service equipment, including any used equipment must meet NSF, BISSC (or other accredited American National Standards Institute (ANSI) commercial food equipment sanitation certification) unless otherwise specified in R. 61-25. (4-205.10)

Food equipment used in the retail food establishment must bear the certification mark of the (ANSI) accredited organization that certified the equipment (e.g. NSF, UL, ETL, BISSC).

The following sites may be useful in confirming that the equipment under consideration is certified and listed:

NSF - http://info.nsf.org/Certified/Food/

**UL** - http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm

ETL - http://etlwhidirectory.etlsemko.com/WebClients/ITS/DLP/products.nsf/\$\$Search?OpenForm

BISSC - http://www.bissc.org/php/bissc-listing.aspx?list=company

## **Equipment Location: (4-401)**

Equipment, a cabinet used for food storage, or a cabinet used to store cleaned and sanitized equipment and utensils, laundered linens, and single-service and single-use articles may not be installed in the following locations:

- Under:
  - Exposed sewer lines.
  - Leaking automatic fire sprinkler heads.
  - Lines on which water has condensed.
  - Leaking water lines.
  - Open stairwells.
  - o Any other source of contamination.
- In:
- Locker rooms.
- Toilet rooms.
- Garbage rooms.
- Mechanical rooms.

#### **Equipment Installation:**

Floor- mounted equipment: (4-402.11(A), 4-402.12(A & B))

## Fixed equipment

- Spaced or sealed.
  - Enough space should be provided to allow access for cleaning along the sides, behind and above the equipment.
  - When access space cannot be provided or spacing of equipment is not practical, the equipment should be sealed to adjoining equipment or walls if the equipment is exposed to spillage or seepage.
  - When not subject to spillage or seepage, equipment may be spaced from adjoining equipment, walls and ceilings no more than one thirty-second (1/32) inch.
  - Considerations:
    - An obstruction behind or between equipment such as a chase, a rigid utility connection or similar barrier may result in the need for additional spacing.
    - Fans on the back of equipment may also result in the need for additional spacing.
- Elevated on legs or sealed.
  - Equipment elevated on legs should provide at least six (6) inches of clearance between the floor and the equipment.
    - Exception: If no part of the floor under the equipment is more than six (6) inches from the cleaning access point, the clearance space may be four (4) inches.
  - Equipment not installed on legs should be sealed to the floor.

## Easily movable equipment (1-201.10(33))

- When equipment is installed on casters, flexible utility lines and/or quick disconnect couplings should be provided.
- Casters should be properly sized for the equipment served. Some manufacturer's list casters as a standard
  feature on their equipment; other manufacturer's may list casters as an optional feature that can be ordered
  separately.
- Casters can be installed on most food service equipment, including ice machines.

- An equipment restraining cable may be used to limit movement of food equipment and protect gas hoses and/or electrical connections from damage or disconnection.
- Skids designed for food equipment may be an acceptable alternative to casters.
- Furniture skids, movers or slides are designed to facilitate moving furniture.

#### Counter-mounted equipment: (4-402.11(B), 4-402.12(D & E))

Food equipment, installed on a counter or table, that is not easily movable because of size, weight or rigid utility connections should be installed in one of the following ways:

- Elevated on legs or sealed.
  - Counter-mounted equipment elevated on legs should provide at least four (4) inches of clearance between the table and the equipment.
    - Exceptions:
      - Clearance may be three (3) inches if the horizontal distance of the table top under the equipment is no more than twenty (20) inches from the cleaning access point.
      - Clearance may be two (2) inches if the horizontal distance of the table top under the equipment is no more than three (3) inches from the cleaning access point.
  - Counter-mounted equipment not installed on legs should be sealed to the table or counter.

#### Easily movable equipment (1-201.10(33))

Counter-mounted equipment is generally considered portable if it is small and light enough to be easily moved by one person. Easily movable means that the equipment can be lifted or slid across a table or counter to allow cleaning access underneath and behind the equipment. Also, to be considered portable, equipment may not have fixed utility connections.

#### Protection for Foods on Display (Food Guards, Sneeze Guards): (3-306.11)

When food is on display at a counter, service line, buffet or salad bar, devices such as food guards (sneeze guards) or display cases are to be used to protect food from contamination.

Food guards (sneeze guards) and display cases are not required for:

- Nuts in shells.
- Whole, raw fruits and vegetables that are intended for hulling, peeling or washing by the consumer before consumption.
- · Packaged foods.

## Considerations

- When tray slides are provided on self-service equipment, sneeze guards may require adjustments to be effective.
- On buffet style food service equipment, food should not be displayed more than 30-inches from the serving side
  of the counter to prevent contamination.

#### Equipment and Utensils: (4-101.11, 4-102, 4-201.11, 4-202.11)

Equipment, utensils, and single-service and single-use articles must not transmit odor, color, taste, or cause contamination of food.

Multi-use utensils and food contact surfaces must be constructed from materials that are:

- Durable and corrosion-resistant under normal conditions of use.
- Smooth, easily cleanable and nonabsorbent.
- · Resistant to pitting, chipping, crazing, scratching, scoring, distortion and decomposition.

Single-service and single use articles must be constructed from materials that are clean and safe.

For guidance on acceptable materials see R. 61-25, Chapter 4 – Equipment, Utensils and Linens.

## Clothes Washers and Dryers: (4-301.15, 4-401.11 (C))

If work clothes and linens are to be laundered on the premises a mechanical washer and dryer are required. A mechanical washer and dryer is not required when laundering is limited to wiping cloths.

When installed the washer and dryer must be located:

- So that they are protected from contamination.
- Away from exposed food, clean equipment, utensils and linen; and unwrapped single-service and single-use articles.

## SECTION 6 - TEMPERATURE MEASURING DEVICES/CHEMICALS

#### Temperature Measuring Devices (Thermometers): (4-201.12, 4-203.11, 4-203.12, 4-204.112, 4-302.12)

Food temperature measuring devices:

- When scaled only in Fahrenheit, it must be accurate to plus or minus two (2) degrees F in the intended range of use.
- When scaled in Celsius only or dually scaled in Celsius and Fahrenheit, it must be accurate to plus or minus one
   (1) degree C in the intended range of use.
- May not be constructed of glass unless it is encased in a shatter proof coating such as a candy thermometer.

Air and water temperature measuring devices:

- When scaled only in Fahrenheit, it must be accurate to plus or minus three (3) degrees F in the intended range of use.
- When scaled in Celsius only or dually scaled in Celsius and Fahrenheit, it must be accurate to plus or minus one point five (1.5) degrees C in the intended range of use.
- <u>Exception</u>: Placement of a thermometer to measure ambient air surrounding food is not required when it is not practical due to the design, type and use of the equipment.
  - <u>Examples</u>: Heat lamps, cold plates, steam tables, bain-maries, insulated food transport containers, buffet and salad bars.

Temperature measuring devices inside or affixed to equipment:

- Hot and cold equipment used for TCS foods must be equipped with an integral or permanently affixed thermometer.
- Sensor of a temperature measuring device must be installed to measure at the warmest part of a mechanical refrigeration unit.
- Sensor of a temperature measuring device must be installed to measure at the coolest part of a hot food storage unit.

## Poisonous or Toxic Materials Storage (Chemicals): (7-201, 7-202, 7-203, 7-301)

- Original containers must have a legible manufacturer's label.
- Working containers used to store cleaners, sanitizers, or other poisonous or toxic materials taken from bulk containers must have a clear and individual label identified with the common name of the material.
- Chemicals and other cleaning supplies must be stored so that they cannot contaminate food, equipment, utensils, linens and single-service articles.
  - o This can be achieved by:
    - Providing spacing or partitioning.
    - Locating chemicals and other cleaning supplies in an area that is not above food, equipment, utensils, linens and single-service articles.
  - <u>Exception</u>: Equipment and utensil cleaners and sanitizers may be stored in warewashing areas for convenience if they are stored to prevent contamination of food, equipment, utensils, linens and singleservice articles.
- Only poisonous or toxic materials required in the day-to-day operation and maintenance of the facility, such as cleaning and sanitizing chemicals and chemicals used for insect and rodent control, are allowed in a retail food establishment.
  - Exception: This restriction does not apply to poisonous or toxic materials offered for retail sale.
- A pesticide label must state that it is allowed to be used in a retail food establishment.
- Containers previously used to store poisons, toxic materials, chemicals or other cleaning supplies may not be
  used to store, transport or dispense food or beverages.

## First Aid Supplies and Medicines: (7-207, 7-208)

First-aid supplies and personal medicines located in the retail food establishment for employee use must be stored in a way to prevent contamination of food, equipment, utensils, linens and single service and single-use articles.

- First aid supplies must be stored in a kit or a container.
- Employee medicines that require refrigeration must be stored as follows:

- Stored in a package or container.
- Package or container kept inside a covered, leakproof container.
- Covered, leakproof container must be identified as a storage container for medicines.

## **Outdoor (Premises):**

#### Walking and Driving Surfaces: (6-102.11(A), 6-202.19)

- Must be surfaced with concrete, asphalt, gravel or other similar material that minimizes dusty and muddy conditions, and facilitates maintenance.
- Must be graded to drain.

## Servicing Area (for mobile food units and mobile push carts: (9-1(J))

Must be constructed of smooth and nonabsorbent materials such as concrete or asphalt.

## Refuse, Recyclables and Returnables: (5-501, 5-502, 5-503, 6-202.110)

- Outdoor refuse, recyclables and returnables storage area:
  - Surface of refuse areas must be:
    - Constructed of smooth, durable and nonabsorbent material, such as concrete or asphalt.
    - Curbed and graded to drain to prevent the pooling of waste water.
  - o If an enclosure is provided, it must be constructed of materials that are durable and cleanable.
  - Should have sufficient number and capacity of waste handling units to hold accumulation.
  - Waste handling units:
    - Must be made of durable, cleanable and nonabsorbent materials.
    - When used for materials containing food residue must have tight-fitting lids doors or covers.
      - Drains must have drain plugs.
- On-site compactor, if provided must be installed so that:
  - Debris accumulation is minimized.
  - o Attraction and harborage of insects and rodents are minimized.
  - Cleaning around the unit can be performed easily.
- Indoor refuse, recyclables and returnables storage area, if provided must:
  - o Meet floor, wall, and ceiling finish requirements specified in the <u>Indoor (Finishes)</u> section.
  - o Waste handling units and receptacles must be made of durable, cleanable and nonabsorbent materials.
  - o Have sufficient number and capacity of waste handling units to hold accumulation.
  - o Located separate from food, equipment, utensils, linens, and single-use and single-service articles.
  - A receptacle that contains food residue, must be covered:
    - If the unit is not in continuous use.
    - When the unit has been filled.
- Cardboard and other packaging material that does not contain food residue may be stored outside without being stored in a covered receptacle provided:
  - o Materials are awaiting regularly scheduled pickup for recycling or disposal.
  - Materials are stored so that it does not create harborage for rodents and insects.
- A redeeming machine for recyclables and returnables may be located in a packaged food storage area or a customer area provided:
  - Food, equipment, utensils, linens, and single-use and single-service articles are not exposed to contamination from the machine.
  - No health hazard or nuisance is created.

#### **SECTION 7 – APPLICATION**

## **Contents of Application: (8-302.14)**

For New Facilities (8-302.14(A)(8)) - Provide proposed equipment layout and finish schedules. When requested, provide construction materials.

## Certified Food Protection Manager: (2-102.12, 2-102.20, 8-302.14(A)(10))

At least one employee having supervisory and management responsibility and is responsible for directing and controlling food preparation and service must be a certified food protection manager. The employee must show proficiency of required information by passing a test that is part of an ANSI accredited program for managers.

<u>Exception</u>: Certification does not apply to certain types of retail food establishments when it is considered by the Department to pose minimal risk for causing or contributing to foodborne illness. This consideration is based on the nature of the operation and the extent of food preparation.

## Employee Health: (2-103.11(O))

The retail food establishment must have a written plan for the restriction, exclusion and re-instatement of food employees when they are restricted or excluded for conditions specified in 2-201.12.

#### Submitting the Application for a Retail Food Establishment Permit: (8-302.11 - 8-302.13, 8-303.20(A)(1)(a))

## **New Facility:**

An owner or an officer of the legal entity owning the proposed retail food establishment must submit a complete Retail Food Establishment Application & Permit Document and pay a \$60.00 inspection fee at least thirty (30) calendar days before the planned opening date at the local EQC office.

## Pre-operational Inspection: (8-203.10)

A pre-operational inspection:

- Must be requested by the permit holder at least fourteen (14) calendar days prior to an inspection to issue a
  permit.
- Is conducted by the Department to determine compliance with the regulation for the purpose of obtaining a
  permit.

Upon inspection, the retail food establishment must comply with the requirements of the regulation in order that a permit may be issued.

## **Routine Change of Ownership:**

When the retail food establishment is in the process of a change of ownership, the Department must be notified immediately.

The new owner or presiding officer must submit a complete Retail Food Establishment Application & Permit Document and pay a \$60.00 inspection fee within fifteen (15) calendar days of the date of change of ownership at the local EQC office.

For additional information on the requirements and conditions of a change of ownership see R.61-25, under 8-303.20.

## **Structural Changes or Demolition**

When construction of a retail food establishment involves demolition and renovation contact DHEC's asbestos section at (803) 898-4289 prior to commencing activities.